

METHOD AND APPARATUS FOR APPLYING DOWNWARD FORCE ON WAFER DURING CMP

ABSTRACT OF THE DISCLOSURE

An apparatus for applying a wafer to a polishing belt during a CMP operation includes a spindle having an upper end and a lower end. A wafer carrier is coupled to the lower end of the spindle. A linear force generator is disposed at the upper end of the spindle. A load cell is positioned between the linear force generator and the upper end of the spindle. A controller is coupled to the load cell for controlling the force applied by the linear force generator. A method for applying downward force on a wafer during CMP also is described.